APPENDIX B

Pegram Compressor Station
Northwest Pipeline Corporation
Williams Gas Pipeline

P-030315

Potential to Emit
Expected Emissions

PEGRAM STATION POTENTIAL TO EMIT

Facility Total Potential to Emit

Pollutant	Unit 1 Solar T-4700	Unit 2 Solar T-4500	Pipeline & Fuel System	On-site Roads	TOTAL (T/yr)	
PM_{10}	0.98	0.90		0.03	1.90	
SO_2	0.86	0.86			1.73	
CO	12.14	11.13			23.27	
NO_X	98.55	98.55			197.10	
VOC	0.31	0.28	0.19		0.78	
Benzene	0.002	0.002			0.00	
Ethylbenzene	0.005	0.004			0.01	
Formaldehyde	0.105	0.096			0.20	
Toluene	0.019	0.018			0.04	
Xylenes	0.009	0.009			0.02	
Acetaldehyde	0.006	0.005			0.01	0.28

Operating Parameters for Unit 1

	Fuel Flow (MMBtu/hour)	Lower Heating Value (Btu/lb)	Heat Content (Btu/ft^3)	Fuel Usage Rate (ft^3/hour)	Fuel Flow Rate (lbs/hour)	Hours per year
Maximum	33.8	20,612	939	35,996	1,640	8760

Unit 1 PTE

Pollutant	Estimated Emissions				Emission Factor Source
	Emission factor	Units	Emissions (lbs/hour)	Emissions (t/yr)	
PM_{10}	6.60E-03	lb/MMBtu	0.223	0.98	AP-42 Table 3.1-2a; April 2000.
SO_2	1.97E-01	lb/hr	0.197	0.86	Based on grain loading.
CO	8.20E-02	lb/MMBtu	2.77	12.14	AP-42 Table 3.1-1; April 2000.
NO_X	22.5	lb/hr	22.50	98.55	Manufacturer's Data.
VOC	2.10E-03	lb/MMBtu	0.071	0.31	AP-42 Table 3.1-2a; April 2000.
Benzene	1.20E-05	lb/MMBtu	4.06E-04	0.002	AP-42 Table 3.1-3; April 2000.
Ethylbenzene	3.20E-05	lb/MMBtu	1.08E-03	0.005	AP-42 Table 3.1-3; April 2000.
Formaldehyde	7.10E-04	lb/MMBtu	2.40E-02	0.105	AP-42 Table 3.1-3; April 2000.
Toluene	1.30E-04	lb/MMBtu	4.39E-03	0.019	AP-42 Table 3.1-3; April 2000.
Xylenes	6.40E-05	lb/MMBtu	2.16E-03	0.009	AP-42 Table 3.1-3; April 2000.
Acetaldehyde	4.00E-05	lb/MMBtu	1.35E-03	0.006	AP-42 Table 3.1-3; April 2000.

Operating Parameters for Unit 2

	Fuel Flow (MMBtu/hour)	Lower Heating Value (Btu/lb)	Heat Content (Btu/ft^3)	Fuel Usage Rate (ft^3/hour)	Fuel Flow Rate (lbs/hour)	Hours per year
Maximum	30.98	20,612	939			8760

Unit 2 PTE

Pollutant	Emissions				Emission Factor Source
	Emission factor	Units	Emissions (lbs/hour)	Emissions (t/yr)	
PM_{10}	6.60E-03	lb/MMBtu	0.204	0.90	AP-42 Table 3.1-2a; April 2000.
SO_2	1.97E-01	lb/hr	0.197	0.86	Based on grain loading.
CO	8.20E-02	lb/hr	2.54	11.13	AP-42 Table 3.1-1; April 2000.
NO_X	22.5	lb/hr	22.50	98.55	Manufacturer's Data.
VOC	2.10E-03	lb/MMBtu	0.065	0.28	AP-42 Table 3.1-2a; April 2000.
Benzene	1.20E-05	lb/MMBtu	3.72E-04	0.002	AP-42 Table 3.1-3; April 2000.
Ethylbenzene	3.20E-05	lb/MMBtu	9.91E-04	0.004	AP-42 Table 3.1-3; April 2000.
Formaldehyde	7.10E-04	lb/MMBtu	2.20E-02	0.096	AP-42 Table 3.1-3; April 2000.
Toluene	1.30E-04	lb/MMBtu	4.03E-03	0.018	AP-42 Table 3.1-3; April 2000.
Xylenes	6.40E-05	lb/MMBtu	1.98E-03	0.009	AP-42 Table 3.1-3; April 2000.
Acetaldehyde	4.00E-05	lb/MMBtu	1.24E-03	0.005	AP-42 Table 3.1-3; April 2000.

PEGRAM STATION ESTIMATED EMISSIONS

Facility Total Estimated Emissions

Pollutant	Unit 1 Solar T-4700	Unit 2 Solar T-4500	Pipeline & Fuel System	On-site Roads	TOTAL (T/yr)
PM_{10}	0.98	0.90		0.03	1.90
SO_2	0.86	0.86			1.73
CO	5.37	4.71			10.08
NO_X	60.49	53.44			113.92
VOC	0.31	0.28	0.19		0.78
Benzene	0.002	0.002			0.00
Ethylbenzene	0.005	0.004			0.01
Formaldehyde	0.105	0.096			0.20
Toluene	0.019	0.018			0.04
Xylenes	0.009	0.009			0.02
Acetaldehyde	0.006	0.005			0.01

Operating Parameters for Unit 1

	Fuel Flow (MMBtu/hour)	Lower Heating Value (Btu/lb)	Heat Content (Btu/ft^3)	Fuel Usage Rate (ft^3/hour)	Fuel Flow Rate (lbs/hour)	Hours per year
Maximum	33.8	20,612	939	35,996	1,640	8760

Unit 1 Estimated Emissions

Pollutant	Estimated Emissions				Emission Factor Source
	Emission factor	Units	Emissions (lbs/hour)	Emissions (t/yr)	
PM_{10}	6.60E-03	lb/MMBtu	0.223	0.98	AP-42 Table 3.1-2a; April 2000.
SO_2	1.97E-01	lb/hr	0.197	0.86	Based on grain loading.
CO	1.23	lb/hr	1.23	5.37	Source test average
NO_X	13.81	lb/hr	13.81	60.49	Source test average
VOC	2.10E-03	lb/MMBtu	0.071	0.31	AP-42 Table 3.1-2a; April 2000.
Benzene	1.20E-05	lb/MMBtu	4.06E-04	0.002	AP-42 Table 3.1-3; April 2000.
Ethylbenzene	3.20E-05	lb/MMBtu	1.08E-03	0.005	AP-42 Table 3.1-3; April 2000.
Formaldehyde	7.10E-04	lb/MMBtu	2.40E-02	0.105	AP-42 Table 3.1-3; April 2000.
Toluene	1.30E-04	lb/MMBtu	4.39E-03	0.019	AP-42 Table 3.1-3; April 2000.
Xylenes	6.40E-05	lb/MMBtu	2.16E-03	0.009	AP-42 Table 3.1-3; April 2000.
Acetaldehyde	4.00E-05	lb/MMBtu	1.35E-03	0.006	AP-42 Table 3.1-3; April 2000.

Operating Parameters for Unit 2

	Fuel Flow (MMBtu/hour)	Lower Heating Value (Btu/lb)	Heat Content (Btu/ft^3)	Fuel Usage Rate (ft^3/hour)	Fuel Flow Rate (lbs/hour)	Hours per year
Maximum	30.98	20,612	939			8760

Unit 2 Estimated Emissions

Pollutant	Estimated Emissions				Emission Factor Source
	Emission factor	Units	Emissions (lbs/hour)	Emissions (t/yr)	
PM_{10}	6.60E-03	lb/MMBtu	0.204	0.90	AP-42 Table 3.1-2a; April 2000.
SO_2	1.97E-01	lb/hr	0.197	0.86	Based on grain loading.
CO	1.08	lb/hr	1.08	4.71	Source test average
NO_X	12.20	lb/hr	12.20	53.44	Source test average
VOC	2.10E-03	lb/MMBtu	0.065	0.28	AP-42 Table 3.1-2a; April 2000.
Benzene	1.20E-05	lb/MMBtu	3.72E-04	0.002	AP-42 Table 3.1-3; April 2000.
Ethylbenzene	3.20E-05	lb/MMBtu	9.91E-04	0.004	AP-42 Table 3.1-3; April 2000.
Formaldehyde	7.10E-04	lb/MMBtu	2.20E-02	0.096	AP-42 Table 3.1-3; April 2000.
Toluene	1.30E-04	lb/MMBtu	4.03E-03	0.018	AP-42 Table 3.1-3; April 2000.
Xylenes	6.40E-05	lb/MMBtu	1.98E-03	0.009	AP-42 Table 3.1-3; April 2000.
Acetaldehyde	4.00E-05	lb/MMBtu	1.24E-03	0.005	AP-42 Table 3.1-3; April 2000.